



# Indiana State Department of Health

## Epidemiology Resource Center

### Quick Facts

#### About Toxoplasmosis

##### What is Toxoplasmosis?

Toxoplasmosis is a parasitic disease caused by the protozoa, *Toxoplasma gondii*. The disease is a generalized infection that may be without symptoms, a mild illness causing lymph node swelling, or a syndrome similar to infectious mononucleosis. The protozoa have been found in most warm blooded animals including pets, livestock, and humans. For most people, toxoplasmosis is a benign illness. It can be life threatening to the immune-compromised or result in severe complications for infected fetuses.

##### How is Toxoplasmosis spread?

People become infected with toxoplasmosis by one of several ways:

- Eating unwashed vegetables grown in contaminated soil.
- Eating or handling undercooked or raw meat from infected animals.
- Changing litter boxes of infected cats and accidentally touching hands to mouth afterwards and before washing hands.
- Gardening or other exposure to soil contaminated by infected cat feces and touching hands to mouths afterwards and before washing hands.
- Directly from pregnant mother to the unborn fetus when the mother becomes infected during pregnancy.

Domestic livestock and wildlife used for food, as well as poultry may be infected with toxoplasmosis. Cats are the only species known to have an infection where the infective stage is excreted in feces and contaminates the environment. This stage,

called an oocyst, becomes infective within 48 hours after excretion and remains viable for several months in spite of harsh environmental conditions, such as freezing, rain, or heat and dryness.

### **Who is at risk for developing severe Toxoplasmosis?**

- Infants born to mothers who are recently (during or just before pregnancy) infected with *Toxoplasma gondii*.
- Persons with severely weakened immune systems, such as individuals with HIV/AIDS, those taking certain types of chemotherapy, and those who have recently received an organ transplant.

### **If I am at risk for severe Toxoplasmosis can I keep my cat?**

Yes, you may keep your cat; there are several safety precautions to avoid being exposed to *Toxoplasma gondii* :

- Change the litter box daily. The parasite does not become infectious until 1 to 5 days after it is shed in a cat's feces. If you are pregnant or immuno-compromised:
  1. Avoid changing cat litter if possible. If no one else can perform the task, wear disposable gloves and wash your hands thoroughly with soap and water afterwards.
  2. Always keep your cat indoors.
  3. Do not adopt or handle stray cats, especially kittens. Do not get a new cat while you are pregnant.
- Feed cats only canned or dried commercial food or well-cooked table food, avoid feeding raw or undercooked meats.
- Keep your outdoor sandboxes covered.

### **How do I know if I have Toxoplasmosis?**

You cannot tell without seeing your doctor. Your physician will complete a thorough history, review of signs and symptoms, physical examination and laboratory testing to confirm whether or not you have toxoplasmosis.

Most infections are so mild as not to cause symptoms. For those that are symptomatic, the most common symptoms are body discomfort, fatigue, fever, sore throat, and muscle pain. Some may experience a mononucleosis-like illness with a rash and swollen liver.

Rarely an infection can occur in the eye leading to vision problems.

Individuals who are immune-deficient may have a reactivation of a previous infection resulting in encephalitis or respiratory symptoms.

Fetuses that become infected from their mothers may be born with vision problems, learning disabilities, or mental retardation. Other birth defects may also occur and in some incidents the baby may die shortly after birth.

### **How can Toxoplasmosis be treated?**

Most cases of toxoplasmosis do not require specific drug treatment. For those who are symptomatic, pyrimethamine and sulfadiazine in combination or clindamycin may be used to eliminate the infection. Other drugs may be used to lessen the symptoms. Your physician can prescribe these medications to you.

### **How is Toxoplasmosis prevented?**

Toxoplasmosis can best be prevented by minimizing exposure to the infective agent. Some steps that can be taken are to:

- Fully cook all meats and poultry (microwaving may not adequately cook all portions fully) and consume only pasteurized dairy products.
- Change litter boxes daily, disposing of used litter in sealed plastic bag or other container, before the infective stage matures.
- Wash vegetables thoroughly before eating. Those from home gardens are at higher risk of infection than commercially acquired.
- Cover sand boxes when not in use to prevent outdoor cats from using them as litter boxes and wash hands of children well after playing in the sandbox and prior to consuming food or drink.
- Wash hands thoroughly with soap and water after handling potentially contaminated soil or after handling raw meats, poultry, or vegetables.

To lessen the risk of cats becoming infected and shedding the oocyst, don't allow them outside; feed them only cooked meats or commercial cat food. Cats often become infected by catching and eating rodents, birds, or other small mammals. Cats that become infected will shed the infective stage for approximately two weeks.

Pregnant women or women contemplating pregnancy should take extra precautions to prevent a toxoplasmosis infection. Those who are immune-deficient should also take additional steps to prevent infections.

All information presented is intended for public use. For more information, please refer to: <http://www.cdc.gov/toxoplasmosis/>.

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